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Mineral Policy Update 1982

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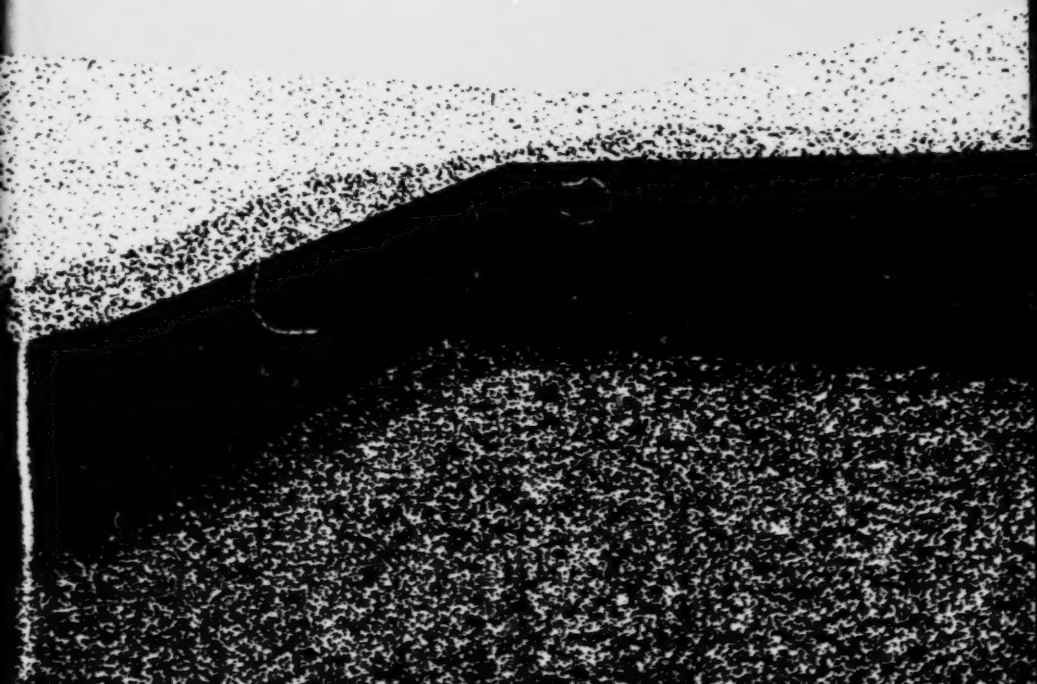

MINERAL POLICY UPDATE 1982
POLICY AND PROGRAM CHANGES AFFECTING THE CANADIAN MINERAL INDUSTRY

by

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FOREWORD

This study looks at federal and provincial policy initiatives and major program changes introduced during 1982. It is hoped that it will act as a reference work, and at the same time stimulate feedback and a continuing flow of information that will help to produce similar surveys of policy change in subsequent years.

The update owes much to the information and guidance provided by representatives of federal and provincial departments and agencies, as well as by officials of mining associations in several jurisdictions. While the authors are very grateful for the help and cooperation received, they take full responsibility for any errors of content or interpretation.

M.J. Wojciechowski
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SUMMARY OF MAJOR INITIATIVES

Federal

General Development Agreements with the provinces are being replaced with new cooperative development agreements that involve separate coordinated federal and provincial programs. Mineral agreements under the new programs will be administered for the federal government by Energy, Mines and Resources rather than by the former department of Regional Economic Expansion.

The Department of Indian Affairs and Northern Development has established a group called Mining Management and Infrastructure, to strengthen mineral development programs.

Eldorado Nuclear Limited became one of the largest Canadian uranium producers, through its acquisition of the Canadian uranium interests of Gulf Oil Corporation and Uranerz Canada, including the Rabbit Lake mine/mill complex and the Collins Bay properties. Eldorado's Beaverlodge mine operation closed in June 1982.

Cape Breton Development Corporation, hit by market weakness and a 12-week strike, reported a drop in revenues and a net mining loss of $22 million for 1981/82.

The Canada Development Corporation became sole owner of Kidd Creek Mines in 1982 following its 1981 acquisition of Texasgulf's Canadian assets.

The federal government considered a number of avenues of possible assistance to Cyprus Anvil Mining Corporation following closure of the company's mine at Faro, Yukon Territory.

The Export Development Corporation provided assistance for the development of mining projects in Peru, Papua New Guinea and Columbia. The assistance is designed to support the sale of Canadian goods and services to the developers.

The widespread and prolonged layoffs and closures at Canadian mining operations during the year led to revisions to the Unemployment Insurance Act to permit payments to unemployed workers for development and reclamation work at minesites (excluding production) and other job development projects.

Research activities conducted or supported by the federal government included uranium tailings research, the establishment of new facilities for asbestos research and communications, studies of underground disposal of nuclear fuel wastes, and coal mining health and safety research.

Policies related to the funding of northern infrastructure projects such as resource roads were under review during 1982, along with federal transportation assistance acts relating to freight originating in the Atlantic provinces.

The Royal Canadian Mint introduced new gold coins weighing one quarter and one tenth of an ounce.

The Foreign Investment Review Agency (FIRA) approved a number of mineral-related foreign acquisitions. The United States lodged a formal protest with the Council of the General Agreement on Tariffs and Trade (GATT), charging that some of FIRA's requirements are in violation of international trade rules.

Canada signed the Sixth International Tin Agreement, and participated in international discussions relating to copper, lead and zinc, and the law of the sea.

The December 1982 budget introduced a compromise designed to ease the introduction of taxation of nonsalary benefits paid to workers in northern and isolated locations, which is expected to take effect in January 1984.

British Columbia

The province conducted a number of land use and economic planning activities over the year that looked into resource potential.

Work continued on infrastructure for the northeast coal development.

The dispute over ownership of offshore resources was taken to the Supreme Court of Canada again by the B.C. government.

Alberta

The Alberta government reviewed its Coal Development Policy with a view to simplification of procedures for exploration and development.

Construction began on facilities for coal research, funded by the Alberta/Canada Energy Resources Research Fund.

The Coal Royalty Regulations were amended during 1982.

Saskatchewan

Private sector companies are no longer required to offer up to 50 percent participation to the Saskatchewan Mining Development Corporation in new hard-rock mining ventures.

The Potash Corporation of Saskatchewan cut back its production levels during the year, and slowed its expansion plans.

Manitoba

The Crown Investments Department was established to manage provincially-owned enterprises including resource developments.

In conjuction with the federal government, the province initiated employment and mineral exploration programs in an effort to offset the decline in mining activities.

Ontario

The Board of Industrial Leadership and Development (BILD) introduced a number of programs to assist the mining industry, including GOMILL, industrial mineral grants, remote sensing activities, drill core libraries, and establishment of the Resource Machinery Development Centre.

Job-creation programs to assist unemployed mine workers were developed in cooperation with the federal government.

The Ontario Mining Act was under review during the year, a new Mineral Aggregate Resource Planning Policy was approved by Cabinet, and new exposure regulations for asbestos were put into effect.

Quebec

Crown corporation activity in the mineral industry continued in Quebec, through SOQUEM, the Societe Nationale de l'Amiante, and Sidbec, although declining prices and markets for gold, asbestos and steel adversely affected the performance of all three.

The province offered incentives to encourage establishment of an alumium smelter at Becancour, east of Montreal.

New legislation (Bill 59) was presented concerning amendments to the Mining Act and simplification of the system of ownership of mineral rights in the province.

The Quebec Crown prosecutor appealed the acquittal of Belmoral Mines Ltd. on charges of criminal negligence.

New Brunswick

The province is reviewing both the Mining Act and the Metallic Mineral Tax Act, as part of its program to encourage the development of exploration, mineral production, and further processing.

Nova Scotia

In addition to its interest in the coal industry, the provincial government took steps to encourage exploration for other minerals including gold.

The uranium moratorium continued in effect, and the commission of enquiry held a number of public hearings on the potential impact of uranium exploration and mining.

Newfoundland

With the assistance of $13.8 million in loans and guarantees from the federal government, the Government of Newfoundland appropriated the Baie Verte asbestos mine, which then resumed shipments in October 1982.

The province continued its program of opening up land for mineral exploration, by recovering properties on which taxes were owing.

Changes to the Mineral Act and Regulations relating to specifications for claim blocks and reporting of exploration were introduced in 1982, and further changes are under consideration.

Northwest Territories

The Government of the Northwest Territories introduced its proposed Resource Development Policy for exploration, development and production activities.

A multi-agency group has begun drafting guidelines for uranium exploration in the NWT.

Amendments to the Mining Safety Ordinance were drafted during 1982.

Yukon Territory

The Yukon government formulated a land use planning policy for the territory.

Closure of the Cyprus Anvil mine at Faro created serious economic problems for the territory. The government participated in discussions aimed at reopening the operation.

Initiatives fédérales

On remplace actuellement les ententes-cadres de développement avec les provinces par de nouvelles ententes de développement cooperatives qui prevoient des programmes fédéraux et provinciaux. Sous les nouveaux programmes, les ententes sur les ressources minérales seront gérées pour le gouvernement fédéral par le ministère de l'Energie, des Mines et des Ressources, et non plus par l'ancien ministère de l'Expansion économique régionale.

Le ministère des Affaires indiennes et du nord a créé un groupe appelé Gestion et infrastructure minières pour renforcer les programmes de développement minier.

Eldorado Nuclear Limited est devenu l'un des plus grands producteurs d'uranium du Canada, apres avoir racheté à Gulf Oil Corporation et Uranerz Canada, ses actifs en uranium canadien, y compris le complexe mine/usine de Rabbit Lake et les biens de Collins Bay. Eldorado a fermé sa mine Beaverlodge en juin 1982.

Frappée par la faiblesse du marché et par une grève de 12 semaines, la Société de développement du Cap-Breton a déclaré une baisse de ses revenus et une perte minière nette de $22 millions pour 1981/82.

La Corporation de développement du Canada est devenue en 1982 l'unique propriétaire des mines de Kidd Creek, ayant acquis en 1981 l'actif canadien de Texasgulf.

Le gouvernement fédéral a examiné plusieurs moyens de venir en aide à la Cyprus Anvil Mining Corporation à la suite de la fermeture par la compagnie de sa mine a Faro dans le Yukon.

La Société de développement des exportations a accordé de l'aide pour le développement de projects miniers au Pérou, en Papua, Nouvelle-Guinée et en Colombie. L'aide est destinée à stimuler la vente de produits et de services canadiens a ces compagnies minières.

Les exploitations minières canadiennes ayant connu pendant l'année des fermetures et arrêts generaux et prolonges, on a été amené à réviser la Loi sur l'assurance-chômage, de

façon à permettre des paiements aux chômeurs effectuant des travaux de développement et de revalorisation sur les sites miniers (à l'exclusion de la production) ou participant à d'autres projets de développement des emplois.

La recherche entreprise ou soutenue par le gouvernement fédéral comprenait des recherches sur les résidus d'uranium, la création de nouvelles installations pour les recherches sur l'amiante et les communications, des études sur l'élimination souterraine des déchets des combustibles nucléaires et des recherches sur les problèmes de santé et de sécurité dans les houillères.

La politique de financement des projets d'infrastructure dans le Nord, tels que les routes d'accès aux ressources, a été passée en revue en 1982, de même que les lois fédérales sur l'aide au transport relatives au transport des marchandises venant des provinces atlantiques.

La Monnaie royale canadienne a frappé de nouvelles pièces d'or pesant un quart et un dixième d'once.

L'Agence pour l'examen de l'investissement étranger (AEIE) a approuvé un certain nombre d'acquisitions étrangères dans l'industrie minière. Les Etats-Unis ont fait des représentations en règle auprès du Conseil de l'accord general sur les tarifs douaniers et le commerce (AGTC), accusant l'Agence d'enfreindre avec certaines de ses conditions les règles de commerce international.

Le Canada a signé le Sixième accord international de l'étain et a pris part à des discussions internationales ayant trait au cuivre, au plomb, au zinc, et au droit de la mer.

Le budget de decembre 1982 a présenté un compromis visant à rendre plus facile l'introduction d'impôts sur les avantages non salariaux que touchent les travailleurs dans le nord et dans les endroits isolés; ce compromis doit entrer en vigueur en janvier 1984.

Columbie-Britannique

Pendant l'année, la province a entrepris un certain nombre d'initiatives en matière de planification économique et d'utilisation des terres dans le but d'examiner les ressources potentielles.

On a poursuivi le travail sur l'infrastructure du développement de houillères dans le nord-est.

Le gouvernement de la C.B. a porté encore une fois devant la Cour Supreme du Canada le litige sur le droit de propriété des ressources sous-marines.

Alberta

Le gouvernement de l'Alberta a revisé sa politique de développement des houillères dans le but de simplifier les procédures relatives a l'exploration et au développement.

On a commencé la construction des installations pour la recherche sur le charbon, financées par le Fonds de recherches Alberta/Canada sur les ressources en énergie.

Les Reglements sur les redevances afférentes à l'exploitation des houillères ont été modifiés en 1982.

Saskatchewan

On n'exige plus des compagnies du secteur privé qu'elles offrent jusqu'à 50 pour cent de participation à la Saskatchewan Mining Development Corporation dans les nouveaux projets d'exploitation minière dans la roche dure.

La Potash Corporation of Saskatchewan a réduit ses niveaux de production pendant l'année et a ralenti ses plans d'expansion.

Manitoba

Le Ministère des Investissements de la Couronne a été crée pour gérer les entreprises détenues par la province y compris les développements de ressources.

La province a mis sur pied conjointement avec le gouvernement fédéral des programmes d'emplois et d'exploration minérale, s'efforçant de compenser la baisse des initiatives minières.

Ontario

Le Board of Industrial Leadership and Development (BILD) a pris un certain nombre de mesures pour venir à l'aide de l'industrie minière. Parmi ces mesures figurent GOMILL, des subventions pour l'industrie minière, de l'aide pour la télédétection, la création de bibliothèques de carottes de sondage et du Resource Machinery Development Centre.

Des programmes de création d'emplois pour venir à l'aide des mineurs en chômage ont été mis sur pied avec la coopération du gouvernement fédéral.

La Loi minière de l'Ontario a été passée en revue pendant l'année, le Cabinet a approuvé une nouvelle politique de planification des ressources globales minérales, et de nouveaux règlements destinés à protéger la santé des travailleurs dans les mines d'amiante sont entrés en vigueur.

Quebec

Les sociétés de la Couronne ont poursuivi leurs activités dans l'industrie minière du Quebec, à travers SOQUEM, la Société nationale de l'amiante, et Sidbec, bien que la baisse des prix et des marchés de l'or, de l'amiante et de l'acier ait eu des effets défavorables sur le rendement des trois entreprises.

La province a offert de l'aide pour encourager la création d'une fonderie d'aluminium à Becancour, à l'est de Montreal.

Un nouveau projet de loi (Projet de loi 59) a été déposé sur les modifications à la Loi minière, et sur la simplification du système de propriété des droits miniers dans la province.

Le procureur de la Couronne du Quebec a interjeté appel de l'acquittement de Belmoral Mines Ltd. sous l'inculpation de négligence criminelle.

Nouveau-Brunswick

La province passe actuellement en revue la Loi minère et la Loi de l'impôt sur les minéraux métalliques dans le cadre d'un programme visant à encourager le développement de l'exploration, de la production minérale et de traitement supplémentaire.

Nouvelle-Ecosse

En plus de son intérêt dans l'industrie charbonnière, le gouvernement provincial a pris des mesures pour encourager l'exploration d'autres minéraux y compris l'or.

Le moratoire sur l'uranium était toujours en vigueur et la commission d'enquête a tenu un certain nombre d'audiences publiques sur l'impact potentiel de l'exploration et de l'extraction de l'uranium.

Terre-Neuve

Avec l'aide de $13.8 millions en prêts et garanties du gouvernement fédéral, le gouvernement de Terre-Neuve a acquis la mine d'amiante de Baie Verte qui a repris ses livraisons en octobre 1982.

La province a poursuivi son programme destiné à ouvrir des terres à l'exploration minérale en recouvrant des propriétés pour lesquelles les impots fonciers n'avaient pas été payés.

En 1982, des modifications ont été apportées à Loi et les Règlements minières concernant les spécifications pour les concessions minières et les reports d'exploration. On envisage d'effectuer d'autres modifications.

Territoires du Nord-Ouest

Le gouvernement des Territoires du Nord-Ouest a presenté la politique de développement des ressources qu'il propose pour l'exploration, le développement et la production.

Un groupe formé de plusieurs agences a commencé à ébaucher des lignes directives pour l'exploration pour l'uranium dans les TNO.

Des amendements au Décret sur la sécurité minière ont été ébauchés en 1982.

Yukon

Le gouvernement du Yukon a formulé une politique de planification de l'utilisation des terres pour le territoire.

La fermeture de la mine Cyprus Anvil à Faro a créé des problèmes économiques graves pour le territoire. Le gouvernement a pris part à des discussions visant la réouverture de la mine.

1. INTRODUCTION

This study is a summary of the major program and policy initiatives of the federal, provincial and territorial governments of Canada in 1982 concerning the Canadian mineral industry. A minimum of detail is provided, as it is expected that readers will go to the recommended government sources for in-depth information on areas that are of particular interest.

For the purpose of this paper, the mineral industry is defined as the industrial sector engaged in production and marketing of metallic minerals, industrial minerals, coal and uranium. Oil and gas are excluded. Production refers to all the processing stages to primary metals, and includes exploration, mine development, mineral extraction, concentration or beneficiation, smelting, and refining.

Where available, a general policy statement from the appropriate minister or department introduces the sections on the respective governments. The specific programs and policies are arranged under the following headings as far as possible:

1. Direct Investment or Equity Participation
   - Crown corporations and other government agencies;
   - joint ventures.
2. Assistance to the Mineral Industry
   - direct financial assistance;
   - federal/provincial programs;
   - mining equipment manufacturing sector;
   - labour;
   - research and information;
   - infrastructure.
3. Regulation of the Mineral Industry
   - health and safety;
   - mineral rights;
   - environment;
   - foreign ownership.
4. Marketing and International Trade
5. Taxation Matters Affecting the Mineral Industry

While certain policies could be classified under more than one heading, we have tried to place each under the heading we feel to be the most relevant. Those policies involving more than one government, are, in most cases, listed under all the governments involved.

2. 1982 IN REVIEW

1982 was a grim year for most of the Canadian mineral industry. The key word became 'survival', as cash flows declined and most companies reported losses. The value of production of nonfuel minerals fell by almost 20 percent over the year, with iron ore and nickel bearing the brunt of the decline. Production of iron ore fell by almost 30 percent, while nickel production fell over 50 percent in value, dropping nickel from third to sixth place among metals in Canada.

Along with falling production and profits went closures and layoffs, with resulting hardships for mining employees and mining communities. As much as 50 percent of the workforce was unemployed at times during the year, and some communities were left completely without an economic base.

The coal industry was an exception to the downward trend, showing a strong performance and gaining first place as Canada's leading mineral sector. Coal production increased 8 percent in volume and over 20 percent in value. Prices over $US 400 for gold maintained interest in that metal as well, with considerable exploration activity. However, the 20-percent increase in volume of production led to an increase of only 1 percent in total value.

Government responses to the difficulties of the industry centred around the problems of unemployed mine workers and single-industry communities. Following recommendations of a federal-provincial task force, the Unemployment Insurance Act was revised to permit initiation of new federal-provincial job program initiatives. Looking ahead to an economic upturn, a number of provinces were engaged in reviews of their mining and mineral taxation legislation, with a view to encouraging further mineral exploration and development by improving the land tenure system and the taxation and regulation of mineral-related activities.

3. FEDERAL GOVERNMENT

Introduction

Regional Assistance

In 1974 the federal government signed 10-year General Development Agreements with all provinces except Prince Edward Island, to promote regional development. Subsidiary agreements provided federal funds along with provincial support for mineral development purposes. As these joint federal-provincial agreements expired in recent years, a new generation of cooperative development agreements has been introduced. No longer joint federal-provincial programs, the new agreements give higher visibility to the federal expenditures because they include exclusively federal programs. They are also supplemented by corresponding coordinated but smaller provincial programs. Under the new reorganization (see below), new mineral agreements will be negotiated by the Mineral Policy Sector of Energy, Mines and Resources, rather than by DREE. EMR will also develop the cooperative work program in conjunction with the provinces, and will manage federal expenditures and activities.

Reorganization

Prime Minister Trudeau in January announced plans to reorganize a number of government departments responsible for economic matters. The reorganization was said to be a necessary response to changing regional and industrial circumstances and a more competitive and complex trading world. The departments involved are Regional Economic Expansion (DREE), Industry Trade and Commerce (ITC), and External Affairs. The first two are to be replaced by two new departments, with rearranged responsibilities.

The Ministry of State for Economic and Regional Development (MSERD) was created to oversee regional coordination of federal government industrial development policies and programs, including a number of mineral-related federal-provincial programs. MSERD will assist Cabinet with analysis and information on regional economic development issues. Its regional offices will help to ensure that federal government policies are sensitive to regional issues, and that provincial officials understand the federal objectives

and decisions. The department's mandate also includes analysis of global trade strategies, in particular the trade dimensions of regional and sectoral economic development policies.

The Department of Regional Industrial Expansion (DRIE) will be formed from parts of the former ITC and DREE. Besides the industrial incentives program, the department will be responsible for the Foreign Investment Review Agency, the Federal Business Development Bank, Canadian Patent Development Limited, National Design Council, Enterprise Development Board, Canadian Industrial Renewal Board, Textile and Clothing Board, Cape Breton Development Board, Atlantic Development Council, the Office of Industrial and Regional Benefits and the Industrial Opportunities Program Board. The Minister will also head the newly-formed Office of Industrial Adjustment. A Minister of State, Small Business and Tourism, will assist the Minister of Regional and Industrial Expansion. Until the reorganization legislation is passed (probably late 1983), the department will be known as ITC/DREE.

DREE's responsibility to negotiate, sign and implement programs in the mineral sector has been transferred to the department of Energy, Mines and Resources. As a result, EMR will administer the federal portion of the new cooperative agreements, and will take over administration of the Nova Scotia Energy Conservation subagreement.

The Department of External Affairs will undergo internal restructuring, with the present Secretary of State for External Affairs being joined by a Minister for External Relations and a Minister for International Trade. The new Minister for International Trade will be responsible for the international trade aspects of the former Department of Industry, Trade and Commerce, including the Trade Commissioners Service, the Export Development Corporation and the Canadian Commercial Corporation. The objective of this restructuring is to allow the department to pursue international export markets more aggressively, to give greater priority to economic matters in the development of foreign policy, to facilitate economic development of all regions of Canada, and to assist in marketing the products of these developments in a competitive world trade environment.

The Department of Indian Affairs and Northern Development reviewed the mandate and organization of its Northern Affairs Program over 1982, and rearranged some of its

structures and functions. Mining activities have been consolidated in a group called Mining Management and Infrastructure, within the Northern Resources and Economic Planning Branch. The group's responsibilities include mineral policy, mining administration, and infrastructure. It is hoped that the reorganization will give mining a higher visibility and strengthen mineral development programs, as recommended by the Northern Mineral Advisory Committee (NMAC) in its 1979 report, and emphasize the importance of the linkage between mineral policy and infrastructure.

Mineral Policy Studies

MINERAL POLICY DISCUSSION PAPER

The November 1981 budget document, Economic Development for Canada in the 1980s, outlined a framework to guide federal government policy in the 1980s. The document stressed that the development of natural resources was to be a leading economic priority.

The first in a series of follow-up papers on the resource sectors was released on 8 March 1982 by Mines Minister Judy Erola, entitled Mineral Policy: A Discussion Paper. The discussion document outlined a broad range of policy proposals and emphasized that they are not firm policy initiatives. In outlining the context of the proposals, the document stated that opportunity is the theme, private sector initiative with complementary government action is the philosophy, and maximization of returns to labour and capital - without compromising on social objectives - is the goal.

The paper highlights the following six areas, and offers a number of policy recommendations relating to each:

1. junior mining
2. mineral machinery
3. science and technology
4. employment and quality of working life
5. international marketing
6. investment climate.

Following on recommendations in the discussion paper, it was decided to have an existing federal-provincial working group of officials analyse the tax system to see what tools are available to help junior mining companies in raising

capital and meeting financial problems, and to strike a special task force to identify the particular needs of communities dependent on mining for their economic life, especially those communities hardest hit by the recession. Both these committees issued reports during 1982 (see below).

REPORT OF THE TASK FORCE ON MINING COMMUNITIES

The task force included representatives of the federal, provincial and territorial governments, industry, and organized labour, and was established at the request of the Minister of State for Mines, following review of the federal government's mineral policy discussion paper. Its report was released in September 1982. Many of the task force recommendations are based on the concept of shared risk, i.e. that the burden of responsibility must be shared by all involved: industry, labour, governments and mining communities themselves.

In the short term, it was recommended that the Unemployment Insurance Act be amended immediately to permit laid-off mineworkers to carry out nonproduction projects at the minesite, such as ground preparation and reclamation, and that additional funding be made available to implement such programs. The full taxation of employee allowances in northern and isolated areas, as proposed in the November 1981 budget, was identified as a 'harsh measure'. (The measure was modified when finally implemented late in 1982.)

Long-term problems in need of further study included:

1. the community development and planning process;
2. the level of diversification in mining communities;
3. factors which limit the ability of a worker or community member to relocate;
4. the limited relevance of some government programs to the problems facing mining communities.

Conclusions of the report support the concept of regional centres which serve a variety of resource projects and have a diversified economic base. They also recognize the need to share the risk of investment in housing and infrastructure in single-industry mining communities which face the possibility of eventual closure. Various risk-sharing schemes should be evaluated, including sinking funds, reserve funds, and commercial insurance. To facilitate a

higher degree of mobility of the work force in the event of permanent closure, the report suggests more flexible pension and benefits schemes, and nationwide skills certification.

REPORT OF WORKING GROUP ON TAXATION OF JUNIOR MINING

At a meeting of mines ministers in Ottawa in January 1982, an existing federal-provincial working group was asked to look at the question of taxation of junior mining companies, prospectors and developers. A report was submitted, along with reports from other interested groups including the Prospectors and Developers Association and The Mining Association of Canada, to mines ministers at a conference in St. John in December. The report of the working group has not been made public, but the federal government in its 1983 budget adopted one of the recommendations, the flow-through of earned depletion to be deductible against any income of an investor.

MARKET SHARE AND MARKET ACCESS

In December 1982, the Mineral Policy Sector of EMR released its study entitled The Canadian Mineral Industry in a Changing World Economy. The paper is based on the premise that the growth of the Canadian mineral industry is highly dependent upon exports, and notes that recent structural changes in both the developing and developed countries have had a negative effect on Canadian exports. The paper outlines these structural changes and illustrates some of their implications for Canada. It also looks at the competitiveness of Canadian minerals, and at physical and economic limits to their production. The researchers conclude that Canada's share of world markets will continue to decline, as the rate of new mineral development abroad increases, primarily in the developing countries. However, opportunities still exist for the Canadian mineral industry to profit from the changing international scene, through, for example, a role in developing countries in prospecting, in developing and managing ongoing operations, and as minority equity holders and mediators in the procurement of funds for new ventures.

Direct Investment or Equity Participation

Petro-Canada

Petro-Canada has become an active participant in the mining industry through its interest in coal properties in the Arctic, Nova Scotia, and western Canada.

In the east, Petro-Canada has acquired a licence to explore for coal in the offshore Aspy Bay area on Cape Breton Island and has completed a seismic program. An exploratory drilling program is planned, and the province is also considering an application to carry out research and development work on in-situ underground gasification.

Following several years of investigation with its partners, Canadian Superior Oil Ltd. and McIntyre Mines Ltd., Petro-Canada has received approval in principle from Cabinet and Stage II approval from the British Columbia government's Coal Guidelines Steering Committee for a proposed 3.3 million tpy open pit coal mine in the Monkman Pass area 120 km southwest of Dawson Creek, to provide mainly metallurgical coal. The submission was the second in the three-step approval process required by the provincial government for all coal development proposals.

Petro Canada has deferred a decision to proceed with development of an underground thermal coal mine on its Kipp property near Lethbridge, due to marketing constraints and insufficient rail shipping capacity to west coast ports. Further development of the property awaits a change in market conditions. Production start-up had been scheduled for 1985 and the property was expected to produce approximately one million tpy of thermal coal.

Eldorado Nuclear Ltd.

On October 1, Eldorado Nuclear Ltd. acquired the Canadian uranium interests of Gulf Oil Corporation of Pittsburg through the acquisition of Gulf Minerals Canada Ltd. Under the terms of an agreement signed 28 April 1982, Eldorado purchased all the outstanding shares of Gulf Minerals in return for uranium concentrates from Eldorado's inventory. Gulf will use the concentrates to help fulfill its existing contract commitments. Eldorado also acquired the Canadian uranium interests of Uranerz Canada Ltd., a sub-

sidiary of Uranerzbergbau GmbH of Bonn, West Germany. Through the acquisition of both companies, Eldorado became sole owner of the Rabbit Lake uranium mine/mill complex in northern Saskatchewan plus several significant adjacent uranium deposits. Operations at these facilities will continue under the name Eldor Mines (Eldor Mines is a division of the recently formed Eldorado Resources Limited, which was created in December 1982 during a corporate restructuring of Eldorado Nuclear Limited). Subject to approval from the Government of Saskatchewan, Eldorado also proposes to develop the nearby Collins Bay 'B' orebody to maintain a supply of ore for the Rabbit Lake mill. The provincial Department of the Environment has found the proposal to be technically acceptable; project approval by the Government of Saskatchewan is pending.

With the acquisition of Gulf Minerals' Canadian uranium interests, Eldorado Nuclear became one of the largest uranium producers in Canada, with annual uranium production capacity of 4.5 million pounds of U_3O_8 a year, all from holdings in northern Saskatchewan.

The closing of Eldorado's Beaverlodge mine at Uranium City, announced in December 1981, took place on 30 June 1982. The closure meant that over 800 miners were out of work in the one-industry town of 3,000. The cost of relocating miners and families affected by the closing was estimated to be about $10 million and was to be split by Eldorado and the federal government. A severance package giving employees four weeks' salary for the first year of service, plus an additional two weeks' salary for each additional year of service, was agreed upon. The company also increased salaries by 13 percent effective 1 January 1982, and made a number of pension changes for older employees, despite the fact that the existing United Steelworkers of America contract did not expire until April 1982. Reclamation work and decommissioning were expected to employ 130 workers until June of 1983.

A task force comprising federal, provincial and Uranium City officials was formed to investigate alternatives for the future of the town. The objectives of the task force were to investigate: the feasibility of sustaining Uranium City by economical business opportunities; the social and economic impact on the community and region; and compensation and mitigation measures, if appropriate. The task force submitted its report and recommendations for consideration by the federal and Saskatchewan governments and Eldorado.

The Cape Breton Development Corporation

The Cape Breton Development Corporation (CBDC, formerly known as DEVCO) had a net mining loss of $22 million in fiscal year 1981/82 due to a drop in coal production from 2.65 million tons in 1980/81 to 2,315,000 tons in 1981/82. A 12-week strike by 3,500 miners was the chief cause of the decline in output. The corporation's coal revenues for 1982 totalled $112.4 million, $16.5 million less than the 1981 figure. Export shipments accounted for 30 percent of sales, up from 22 percent in 1981.

A cooperative project of CBDC and the N.B. Power Commission, with $5.5 million in funding from the Special Atlantic Initiatives of the National Energy Program of the Department of Energy, Mines and Resources, will establish a pilot plant for production of dense coal/water mixtures from Cape Breton coal. The project will demonstrate technology for replacing oil with coal in the generation of electricity. CBDC will provide about 50 percent of the costs of construction, to be recovered through the sale of the fuel required for demonstration purposes. A 7-ton/hr pilot production facility was under construction at the end of 1982.

CBDC was forced to sell premier metallurgical coal on thermal markets, after Sydney Steel Corporation (SYSCO), a provincial Crown corporation, cut back drastically on coal purchases. A stockpile of 500 thousand tonnes of coal proved very difficult to move on world markets, particularly due to the price-cutting activities of Poland and South Africa.

CBDC will institute a system to improve and monitor the quality of its domestic coal production. All domestic coal produced will be analyzed, transported in covered cars, and freeze-treated to reduce problems associated with production and delivery of home-heating coal during the winter months. The corporation also established a procedure for customers who may not be satisfied with the quality to return a sample to the retail yard for analysis.

CBDC, the National Research Council, and the departments of Supply and Services and Energy, Mines and Resources have cooperated in the construction of a 300-inch-diameter tunnel-boring machine. This $10 million machine will be used to drive two access and ventilation openings for the Donkin-Morien coal mine. The machine, built by Lovat

Tunnel Equipment of Toronto, will be the first of its kind and size in Canada.

Canada Development Corporation

Kidd Creek Mines became a wholly-owned subsidiary of the Canada Development Corporation (CDC) late in January 1982, following the CDC's acquisition of the Canadian assets of Texasgulf Inc. in 1981. (The federal government owns 48 percent of the voting shares of the Canada Development Corporation.) Kidd Creek has its own board of directors and will act independently of CDC. The company spent a record $10 million on exploration in 1981 and about $17 million for exploration in 1982. In addition to an expanded search for base and precious metals and uranium, Kidd Creek will be seeking opportunities to expand its range of products and to diversify geographically. Kidd Creek Europe will be part of the marketing operation of Kidd Creek Mines; this operation was formerly called Texasgulf Export Corporation of London, England.

Kidd Creek Mines Limited is participating in a combined research effort with Falconbridge Ltd., Inco Metals Company, and Noranda Mines Ltd. in an effort to improve productivity in underground mining of sulphide ores. The group believes that existing mining methods may be eventually replaced by bulk mining methods which are less capital- and labour-intensive. For the year ending December 31, 1982, Kidd Creek reported revenues of $324 million, and a net loss of $37 million. Interest costs for the year were over $77 million.

Assistance to the Mineral Industry

Cyprus Anvil Negotiations

The federal government considered but eventually rejected the idea of buying into Cyprus Anvil Mining Corporation, a subsidiary of Dome Petroleum Ltd. of Calgary, as a possible option in dealing with problems caused by the closure of the mine at Faro, Yukon Territory. Cyprus Anvil closed its Faro mine in June and planned to remain shut down at least until the spring of 1983. The company presented the government with a $30-million refinancing plan early in 1982: about $20 million to come from the public sector, and about $10 million from the mining operation in the form of restructuring and improved productivity.

In October 1982 a joint statement was issued by DIAND, the Government of the Yukon Territory, the United Steelworkers of America and Cyprus Anvil Mining Corporation setting out three principles for reopening the mine at Faro:

1. reopening should be as soon as possible, preferably even earlier than the CAMC's rescheduled spring opening date;
2. both management and the union will make maximum efforts to improve the long-term viability of the mine, including measures to increase productivity;
3. CAMC management will develop an action plan to ensure the commercial and economic viability of the mine, involving all parties with a major stake in the mine's future. The Minister of DIAND undertook to present the plan, including his proposals for federal participation, to his Cabinet colleagues.

Direct Assistance

On August 16 the federal Cabinet approved $13.8 million in loans and loan guarantees towards the reactivation of the former Advocate Mines asbestos mine at Baie Verte, Newfoundland. Early in September ownership of the mine was transferred to Transpacific Asbestos Inc., following expropriation by the provincial government. The region was designated a Special Area in order to qualify for the DREE/ITC assistance, which will be provided over a 3-year period.

Johns-Manville Canada of Asbestos, Quebec, applied to the federal Department of Regional Economic Expansion for a $35-million assistance program to help alleviate the relatively high mine development costs said to be required if the mine life is to be assured until 1988 or beyond. The company continued operations at about one-half of normal capacity as a result of weak demand for asbestos.

The external trade division of the federal department of Industry Trade and Commerce contributed $600,000 (along with $750,000 from Quebec) to fund phase 1 of a feasibility study being conducted by SNC Inc. of Montreal on a project to develop copper deposits in Pakistan's province of Baluchistan, near the border with Iran. If the current negotiations are successful, the Pakistan government will assume the costs for completion of the $5-$6 million study.

Federal/Provincial Agreements

The Canada/New Brunswick minerals and fuel subagreement funded a study of coal/oil-shale combustion, to be completed in 1982 by the Research and Productivity Council of Fredericton.

In December 1981 a new mineral development agreement was signed between the Province of Nova Scotia and the federal Department of Energy, Mines and Resources. The federal program under this agreement will be administered by EMR (not DREE, as was reported in the 1981 update). The agreement introduces 'cooperative' development, with separate projects administered by the federal and provincial governments respectively. The projects will mainly involve collection of basic earth science data, and construction of a facility for storage and future use of drill core samples.

The federal government began a $3.4-million geoscientific program in Newfoundland which will be carried out by the Geological Survey and will continue until March 31, 1984. In conjunction with a $660,000 provincial program, the work will continue studies initiated in the 5-year Mineral Development Agreement which ended in 1982. Mineral deposit studies will be carried out in the Buchans and Baie Verte areas and geological mapping will continue in Newfoundland and Labrador. A major geochemical reconnaissance survey is scheduled for Labrador, as well as an aeromagnetic mapping project on the island.

In December 1982 an Economic Development Agreement was signed by the federal government and the Government of the Northwest Territories. The $21-million agreement will provide a framework for specific priorities still to be established by the two governments.

The federal government is also developing a Yukon Strategic Plan as a first step towards negotiation of an Economic Development Agreement with the Government of the Yukon. The agreement will be followed by subsidiary agreements, some of which will be related to mineral development in the territory.

Assistance to Mining Manufacturing Sector

The Export Development Corporation (EDC) will help raise $215 million (U.S.) for development of the Tintaya copper

mine owned by Empresa Minera Especial Tintaya SA of Peru. A syndicate of international banks will provide $115 million of the total and the EDC will provide $100 million for purchase of mining equipment in Canada.

EDC is lending $88 million (U.S.) to the Ok Tedi Mining Limited consortium to finance sales of an equivalent value of Canadian produced mining equipment for the Ok Tedi Gold Copper Mining Project in Papua New Guinea.

Another EDC agreement will provide $160 million (U.S.) to finance the El Cerrejon Block B Northern Lone coal mining project in Columbia. The agreement supports the sale of Canadian goods and services for the project, which will be coordinated by Northern Construction Company Ltd. of Vancouver.

EDC held a series of half-day workshops on its 'Lines of Credit' service in major business centres across Canada. The workshops were intended to inform exporters, potential exporters, and financial advisors about EDC lines of credit and the benefits of incorporating them into their export marketing strategy.

Human Resources Assistance

The federally-funded Canadian Centre for Occupational Health and Safety (CCOHS) launched a free computerized service in 1982 providing up-to-date information on occupational health and safety matters. The service is presently based on two bibliographic data bases, one acquired from the International Labour Organization in Geneva and one from the National Institute for Occupational Safety and Health in the United States. The CCOHS is also developing its own data base of on-line chemical information in response to its users' needs. During the year a terminal connection was established with Labour Canada's headquarters in Hull. This connection is one of a network being established by CCOHS across Canada. Future plans call for additional access by selected organizations.

In October the federal government began considering whether to subsidize an early resumption of operations at Inco Ltd. and Falconbridge Ltd., if the companies decided against reopening in the Sudbury area in January 1983. It was proposed to apply unemployment insurance benefits and make-work program supplements towards development work

at minesites. The Minister of State for Mines stressed that unemployment insurance cannot be used directly to benefit the private sector, for example in production activities. On 22 December 1982, the Unemployment Insurance Act was changed to allow unemployed workers receiving unemployment insurance to participate in job creation projects without losing their benefits. The changes allow work at mine sites such as waste removal or development to qualify for the program, provided it does not involve production of ore. (Previously, the only job creation projects to qualify for the program had been community improvement projects.) The changes are in accord with the recommendations of the Report of the Task Force on Mining Communities.

Two groups were established to look into the socioeconomic problems arising from the closing of Eldorado Nuclear's Beaverlodge uranium operations at Uranium City. In January a committee representing the federal government, Eldorado and the labour union was established to help the displaced workers find alternative employment. Among the opportunities offered were relocation allowances and other assistance, assistance with recruitment by other potential employees, and reclamation and decommissioning work on the site. In addition, a Task Force was established to look into the future for Uranium City. Chaired by the mayor, the Task Force included representatives of the federal and provincial governments, Eldorado, and the local region. The Steering Committee of the Task Force submitted its report and recommendations to Eldorado and the two governments in May for consideration.

Research and Technology Transfer

The federal government contributed $400,000 to the establishment of the Canadian Asbestos Information Centre located in Montreal. The Centre is the result of the amalgamation of the Institute of Medicine, Work, and Environment (IMTE) and the Institute for Research and Development on Asbestos. The Centre's mandate includes the collection and distribution of information related to asbestos, as well as promoting adherence to safety standards and practices in the mining, processing, manufacture and use of asbestos.

The federal department of Energy, Mines and Resources allocated $1.4 million for research grants in 1982-83 under its continuing Research Agreements program. The funds

were be divided among 34 research centres across Canada which conducted 157 projects in the natural, physical, and social sciences, and in engineering. Funds granted under the program are awarded on the basis of departmental priorities. Approximately 19 percent of the funds were allocated for non-fuel research, with the rest going to energy projects.

In September, the Minister of State for Mines announced the five-year $9.5-million National Uranium Tailings Research Program to study the potential long-term effects of uranium mine and mill wastes after they are abandoned following termination of mining operations. The program stems from the recommendations of the National Technical Planning Group on Uranium Tailings Research, which carried out a year-long review of uranium tailings management in Canada, and included representatives from the federal government and the governments of Saskatchewan, Ontario and Newfoundland as well as provincial research councils, Canadian universities and the uranium mining industry. The group concluded that there is a need to coordinate investigation, results, and analytical data on uranium tailings, and that a deeper understanding is needed of the process whereby contaminated elements are transferred from tailings to the biosphere. It further concluded that a clear definition of the requirements for managing uranium mine wastes following closeout of mining operations is needed. The report also recommended the establishment of a joint program involving the uranium-producing provinces of Ontario and Saskatchewan as well as the federal government.

An underground research laboratory, designed to operate in a small mine as a research centre, is to be built by Atomic Energy of Canada Ltd. near Pinawa in southeastern Manitoba. The major objective of the laboratory is to assess the concept of deep underground disposal of radioactive nuclear fuel wastes in a stable geologic formation. A detailed site evaluation is in progress and is expected to continue until the end of 1983, with completion of the underground development phase scheduled for 1986. The Canadian nuclear fuel waste management program involves many organizations across Canada, including Ontario Hydro, EMR, Environment Canada, several Canadian universities, and private enterprises, as well as cooperative agreements with other countries such as the USA, Sweden and the U.K., who are similarly engaged in waste management research programs.

On March 31 the Minister of State for Mines announced the establishment of the Cape Breton Coal Mining Research Laboratory at Sydney, Nova Scotia. The creation of a safety-oriented mining research facility was recommended by the Elfstrom Commission report on the 1979 Glace Bay mine explosion that took 12 lives. The facility will operate as a regional arm of EMR's CANMET (Canada Centre for Mineral and Energy Technology) and will work with the area's mining operators to identify and resolve coal mine health and safety problems. The objectives of the laboratory are:

1. to develop, in conjunction with the Cape Breton Development Corporation (CBDC), safe and efficient mining techniques for specific mine locations;
2. to establish a program of underground explosion control;
3. to transfer resulting technologies into immediate use;
4. to provide research and development expertise to assist a training extension program to meet the needs of the coal industry in Atlantic Canada.

Annual funding of the laboratory is expected to reach $1.7 million (in 1982/83 dollars) by 1984/85. Some $800,000 of this amount is for extramural research by means of contracts with industry and universities.

In late April a $5.5-million federal program was announced to investigate the feasibility of using a coal and water mixture as a liquid fuel to replace oil in utility generating plants in Atlantic Canada. Funds will be provided by CBDC and the Special Atlantic Initiatives fund of the National Energy Program. CANMET will supply technical support for the pilot plant which will be built near Sydney, Nova Scotia.

A three-day international seminar on metals technology was held in Ottawa October 12-15. The seminar was sponsored by the departments of Energy, Mines and Resources and Industry, Trade and Commerce, in conjunction with the Commission of the European Communities (EC). It was the second in a series of joint Canada/EC seminars on nonferrous metals technology organized under the Framework Agreement for Economic and Commercial Cooperation signed in 1976. Delegates to the seminar included scientists and industrial experts from Canada, the European Community, Spain and Portugal. Observers attended from Australia, Finland, Norway, Sweden and the United States.

The Department of Industry Trade and Commerce/Regional Industrial Expansion has implemented a program to encourage and support the greater use and application of productivity-enhancing technology in Canadian industries including mining. The program is entitled STEP (Support for Technology-Enhanced Productivity). STEP consists of financial incentives, and an industry information program which focuses on examples of applied technology and on the economic, operational, and employment considerations related to the introduction of these technologies. The objective of the program is to heighten awareness among senior management of the potential benefits of applying new technologies, and to encourage their application. With the support of this ITC/DREE program, The Mining Association of Canada initiated a project entitled 'Planning for Technological Change (The Mining Experience)', aimed at increasing output per worker in the mining sector. A range of company-specific and industry-wide experiences has been documented in case study form for this purpose.

Infrastructure Assistance

The federal share of infrastructure investments in the BC Northeast coal development continued in 1982. In anticipation of the increased traffic, maintenance programs and some upgrading were carried out by CN Rail. Cost of upgrading the existing line to handle coal trains is estimated at more than $600 million, and orders have been placed by Ridley Terminals Incorporated for major coal loading equipment.

The federal government is taking steps to upgrade the existing North Canol road in anticipation of the resumption of mineral resource activity in the MacMillan Pass area in the Yukon. Construction is expected to begin in 1984. Initial action is centred on a three-year planning and pre-engineering work program, the costs of which will be equally shared between the federal government and Amax Northwest Mining Co. Ltd. DIAND is developing a new roads policy that will bear directly on the funding of northern infrastructure projects such as the upgrading of the North Canol road.

The government was also approached to provide assistance with the construction of a road and air strip to the Prairie Creek Lead Zinc Silver Properties of Cadillac Explorations Limited near Nahanni National Park in the Northwest Terri-

tories. Construction at the site was stopped just short of completion in June 1982 due to a lack of funds to complete the concentrator and build an all-weather road to the property. No decision on federal funding was made by year end.

Late in 1982 the government announced that it would review the various federal transportation assistance acts which benefit the movement of freight within the Atlantic provinces and from the Atlantic provinces to central and western Canada. Removal or lowering of these subsidies will affect the competitive position of producers of high-bulk low-value minerals such as coal and potash in several regions of Canada.

Regulation of the Mineral Industry

Mining Regulations

Territorial coal regulations were drafted within the Department of Indian Affairs and Northern Development, and plans were made to present them for promulgation in early 1983 following final review by the Northern Minerals Advisory Committee.

Land Use

On 25 February 1982 a memorandum of agreement was signed setting aside 39,000 square kilometres on Ellesmere Island for development as a national park. A two-year study of the options for use of the park will be conducted by Parks Canada and the Government of the Northwest Territories.

On July 30 an ecological reserve covering 26,034 square kilometres was established in the Polar Bear Pass area. Some concern was expressed by environmentalists because it was noted that existing mineral claims in the area would be honoured. However, it appears that the last of the existing mineral claims had lapsed in 1981.

Foreign Investment

The Foreign Investment Review Agency (FIRA) approved applications for foreign investment in a number of mineral-

related Canadian projects throughout the year. The projects include:

1. a proposal by Canada Tungsten Mining Corporation Limited of Vancouver, British Columbia, which is controlled by Amax Inc. of Greenwich, Connecticut, to acquire control of Queenstake Resources Ltd. of Vancouver, British Columbia, a business which is involved primarily in the exploration for and the development of mineral resources;
2. a proposal by Sandvik Canada Corp. of Mississauga, Ontario, which is a wholly-owned subsidiary of Sandvik AB of Sweden, to establish a new business at Mississauga, Ontario to explore for, develop and produce metallic minerals;
3. a proposal by Specalum Metals Ltd. of Hamilton, Ontario, which is owned 40 percent by ECD Finanz Holding AG of Zurich, Switzerland and 60 percent by three Canadian residents, to establish a new business at Hamilton, Ontario, to engage in the recycling, refining, smelting and trading of nonferrous metals;
4. a proposal by Bluesky Mining Ltd. of Calgary, Alberta, which is a wholly-owned subsidiary of the West German-controlled Bluesky Oil and Gas Ltd., also of Calgary, Alberta, to establish a new business in Calgary to explore for, develop and produce metallic minerals, particularly the precious metals, gold and silver. As its initial business activity, Bluesky Mining is conducting exploration programs on a gold property in the Val d'Or region of Quebec and a silver-lead-zinc property near Nelson, British Columbia;
5. a proposal by BP Exploration Canada Limited (BP Exploration) of Calgary, Alberta, to establish a new business at Calgary to engage in the exploration, development and production of potash. BP Exploration is totally owned by BP Canada; 64.4 percent of the shares of BP Canada are owned by The British Petroleum Company Limited of London England, and 35.5 percent are publicly traded in Canada;

In announcing the latter decision, the Honourable Herb Gray, Minister responsible for the administration of FIRA, noted that BP Exploration's first project will be the exploration of a salt-potash prospect at Millstream, N.B. which was commenced in 1981. Further exploration work was planned for 1982 involving the drilling of between 10 and 20 wells, at a cost of up to $7 million. If exploration work indicates that the Millstream property contains an economi-

cally viable potash deposit, an underground exploration program will be initiated and completed by 1985, at a cost of between $15 and $20 million. BP Exploration has also undertaken that, if, upon completion of the underground exploration program, it is satisfied that the property is commercially viable, it will develop the property for production at an estimated cost of $140 million. Mr. Gray further noted that BP Exploration has undertaken to process the ore from the Millstream property locally, to purchase goods and services of Canadian manufacture or origin when competitive, to employ resident Canadians at all levels of responsibility, and to train Canadians as required. BP Exploration also gave future commitments to the government in respect of Canadian equity participation in major new nonmetallic mineral projects.

Asbestos

The World Symposium on Asbestos was held in Montreal May 24-27 under the sponsorship of the Governments of Canada and Quebec, and the Commission of the European Communities. The discussion and findings are expected to influence regulatory initiatives relating to the environmentally-safe production and use of asbestos throughout the world. Among the topics dealt with were: medical data; protection in the workplace; rights and responsibilities; substitutes; risks associated with nonoccupational exposure; research in fibre technology; and legislative perspectives.

Marketing and International Trade

Strategic Minerals

Energy, Mines and Resources, along with government officials from the USA, West Germany, South Africa and Australia, joined the newly-formed International Strategic Minerals Inventory (ISMI) which was established to collect and analyze information on worldwide deposits of minerals considered to be of strategic importance. A trial inventory of chromium, nickel and phosphate deposits was undertaken as a preliminary step toward a more broadly-based inventory.

Maple Leaf Coins

Two new Canadian gold coins were introduced by the Royal Canadian Mint in 1982, in addition to the one-ounce Maple Leaf coin introduced some years ago. Weighing one quarter ounce and one tenth of an ounce respectively, the coins went on sale in North America in October and in Japan in November. The smaller coins are expected to be particularly popular in Japan, since they will be priced sufficiently low to escape the Japanese luxury tax. Production of coins consumes about 50 percent of the gold produced in Canada each year.

General Agreement on Tariffs and Trade

In April 1982 the United States formally requested the Council of the General Agreement on Tariffs and Trade (GATT) to create a panel to examine Canada's Foreign Investment Review Act, and rule on whether it is in violation of international trade rules. The United States' allegation contends that Canadian trade practices distort trade and are contrary to Canadian obligations. The U.S. decision to take its grievances to the GATT council follows a breakdown of consultations with Canada conducted under Article 22 of the GATT in February and March. The specific issues brought before the GATT are all trade related. They include FIRA requirements that foreign companies purchase parts and materials in Canada, export a portion of their production, and establish extensive distribution networks for their products in the country. Canada contends that FIRA's regulations are no tougher than those of other countries in screening foreign investments.

The trade ministers of the 88 member nations of the GATT met in late November 1982 in Geneva for the first meeting in nine years. The outcome of the meeting was inconclusive. No clear-cut commitment to strengthen the free-trade system and to halt the rising protectionist trends was forthcoming. The final communiqué offered a pledge of determination to resist such protectionist measures and to refrain from adopting or maintaining action which was inconsistent with GATT. However, the communique is not binding.

Law of the Sea

The United Nations Conference on the Law of the Sea adopted an international convention on April 30, establishing rules for the use and exploitation of the seas and seabed. Unanimous consent was not achieved, as the United States, Venezuela, Israel and Turkey opposed the convention, seventeen countries abstained, and 130 countries including Canada voted in favour. The convention contains 320 articles and eight annexes, covering such matters as seabed mining, establishing a twelve-nautical-mile territorial sea and 200-nautical-mile exclusive economic zone, the right of innocent passage through territorial seas, and rules covering the future mining of metallic nodules from the ocean floor. The number of minesites will be limited, to encourage phased-in mining of ocean nodules and to minimize disruption to land-based mining.

One hundred and nineteen countries signed the LOS convention by the end of 1982, while 24 countries including the USA, West Germany, Belgium, and Britain had not. The treaty will remain open for signing for two years, and will take effect when 60 countries have ratified their delegates' signatures. The headquarters of the new LOS Authority will be in Jamaica.

In August, the United States, Britain, France and West Germany signed a tentative pact to respect each other's chosen 'claims' and create an independent mechanism to resolve seabed mining disputes. The agreement is seen as an effort to create an alternative treaty to the LOS convention. Canada protested this pact, and called for a broader international agreement.

The five main consortia involved in seabed exploration (which include Inco and Noranda Mines Ltd. as members) also signed an informal pact in the summer of 1982 to respect one another's seabed claims and resolve disputes. This pact does not, however, have any legal effect.

International Lead and Zinc Study Group

The International Lead and Zinc Study Group's 27th Session met in Geneva in October to review developments and discuss the current and future status of lead and zinc production and markets. Consumption and production of lead were expected to be lower in 1982 than in 1981. Only mod-

est increases in mine production, metal production and consumption were forecast for 1983. The ILZSG provides information on worldwide market developments in lead and zinc.

Intergovernmental Council of Copper Exporting Countries (CIPEC)

CIPEC held a ministerial conference July 12 and 13 in Lima, Peru, to determine methods of improving copper markets, in order to strengthen and stabilize copper prices. A resolution was approved recommending guidelines for limited intervention in world metal markets.

A special commission of CIPEC met in Paris on August 10th, and agreed on a specific recommendation intended to raise world copper prices, to be implemented by the ministers of mines of the eight CIPEC countries.

International Tin Agreement

Canada signed the Sixth International Tin Agreement (ITA) April, 1982, and announced its intention to apply the agreement provisionally upon its entry into force on July 1. Support of at least 65 percent of producers and 65 percent of consumers is required for the agreement to enter into force provisionally, while 80 percent is required for definitive entry into force. Canada, which is a relatively small producer of tin, ranks about ninth as a consumer among the noncommunist countries, and was also a consuming member of the five previous agreements. This is in line with Canada's policy of preferring commodity associations that include both producers and consumers, rather than associations of producers alone. The three largest tin producers, Malaysia, Thailand and Indonesia, agreed in May that they will form a tin producers' association if the Sixth ITA is not implemented, without suggesting what form or role such an association would take. These three producers account for nearly two-thirds of world tin production.

Taxation Matters Affecting the Industry

The Minister of Finance, Marc Lalonde, announced on 2 December 1982 that the moratorium on taxation of nonsalary benefits to workers living in northern and isolated locations would end as of 31 December 1983. The nonsalary items,

such as subsidized housing and travel allowances for vacation purposes, had previously been taxable but generally untaxed. A moratorium had delayed the collection of tax on these items from 1980, pending a review of the matter. The 1981 budget had proposed a simple end to the moratorium, but, in response to criticisms that such a drastic change would be disastrous to existing projects already in serious economic difficulties, a compromise was put forward in the December 1982 budget proposal. The taxation would be phased in over a four-year period, beginning 1 January 1984, to ease its impact for existing projects, and ceilings would be placed on the valuation for tax purposes of a number of items. For example, each of the first two vacation trips (to the closest metropolitan centre) each year are assumed to cost no more than $250 per family. Additional travel and all subsequent trips are to be taxed at actual cost. Some nonsalary benefits, such as medical flights and freight allowances, will remain untaxed. Industry is continuing to collect and analyze data to convince the government that even the compromise solution is counterproductive in economic terms.

4. BRITISH COLUMBIA

Introduction

Due to low demand and prices for copper and molybdenum, several copper mines and all three molybdenum mines in B.C. were shut down indefinitely. Mineral exploration declined sharply, with expenditures down more than 50 percent from 1981 levels.

Coal replaced copper in 1982 as the province's most valuable mineral, with $550 million estimated in coal revenues. This is a $36-million increase over 1981. However, the coal industry was affected by volume cutbacks in its principal market, the Japanese steel industry. Both of the two main metallurgical coal exporters shut down for periods late in the year.

While development of new mines was slowed, there was still approximately $2.5 billion being invested in the mineral industry in B.C., mostly in the coal sector. The major project is the $2-billion northeast coal development scheduled to begin shipments in late 1983. The other major coal development, expected to cost approximately $250 million, is the Greenhills metallurgical and thermal coal complex in the Crowsnest Pass district, also scheduled to start up in mid-1982.

An interdepartmental task force, appointed by the B.C. Cabinet Committee on Economic Development, looked into the resource potential of the province. An initial conclusion of the task force was that minerals offer the greatest potential for major economic development in B.C.'s northwestern region through the 1990s. Further studies of sites of specific mineral potential were expected, to aid in planning infrastructure requirements.

The Ministry of Energy, Mines and Petroleum Resources was heavily involved in land use planning activities over 1982, through interdepartmental planning teams, regional resource management committees, and technical planning committees. The objective is to ensure that the land use planning process in B.C. identifies and protects subsurface resources and resource potential for future use. Among the projects considered were parks proposals, hydro transmission lines, and pipelines. The ministry's Land Use Committee drafted a mineral land use policy in 1982 which was to be given official recognition in 1983.

Direct Investment or Equity Participation

B.C. Hydro

Site investigation work was halted on the B.C. Hydro's Hat Creek coal-fired thermal power plant. In its six-month earnings report, B.C. Hydro wrote off $77 million in projected costs for the project, which has resulted in an overall loss of $84.9 million. B.C. Hydro plans to restart the project when market demand increases; meanwhile, studies are continuing on acid rain, weather data, water quality in alpine lakes, and the social and economic impact of the project on surrounding communities and on native Indian people in the Hat Creek area.

Assistance to the Mineral Industry

Infrastructure

Progress continued in 1982 on the infrastructure for the northeast coal development. B.C. Hydro completed equipment purchases, line clearing, and line placement, and work progressed on the Tumbler Ridge substation. Road grading and bridge construction was well advanced on the Chetwynd-Tumbler Ridge Highway. The Heritage Highway between Dawson Creek and Tumbler Ridge was upgraded, and the road subgrade to the Ridley Island Terminal was completed. Planning for the town centre and the first residential area was completed, wells were being drilled, sewage treatment facilities were under construction, and clearing and grading were underway.

Regulation of the Mineral Industry

In June the B.C. government gave approval to Stage II of the Quintette coal project. Quintette and Bullmoose plan to begin coal production in December 1983, once final licences, permits, and approvals have been granted by provincial agencies. Petro Canada's Monkman project received provincial approval in principle during the year, and was proceeding through the 3 stages of the regulatory process.

The B.C. Ministry of Environment ordered Scottie Gold Mines' gold mine at Stewart B.C. to close, because of high levels of cyanide contamination in the glacial lake adjacent to the mine. The mine was closed for 3 days while the problem was solved.

The Carolin gold mine, near Hope B.C., was temporarily closed and the mine was charged under the federal Fisheries Act and the provincial Environmental Protection Act, when heavy spring runoff raised the water level in the tailings pond, necessitating effluent discharges into Ladner Creek. The discharges were alleged to have contained levels of cyanide above those allowed.

Amendments to the Mineral Act were tabled April 13 regarding the cost of maintaining rights in a mineral claim. The amendments provided for an increase of $100 to $300 per year in the first three years of ownership, $500 in the fourth year and $600 in the subsequent years, compared to a constant $200 per year under the existing act. However, the proposed amendments were withdrawn in May.

A dispute between the Canadian federal government and the province of British Columbia over the control of offshore resources was to be taken to the Supreme Court of Canada late in 1982. The Court has already ruled that control over mineral wealth under the ocean off the west coast belongs to the federal government. However, in 1967 the B.C. Court of Appeal ruled that the province controls resources in inland waters, such as the Straits of Georgia. The B.C. government is claiming jurisdiction over most of the waters between the Queen Charlotte Islands and Vancouver Island.

Taxation Matters Affecting the Industry

The before-tax returns for the B.C. mineral industry declined from $215 million in 1981 to a loss of $193 million in 1982. As a result, provincial revenues from mineral resources during 1982 declined to $37 million, almost half the 1981 level. Revenues from the mineral land tax and from coal and industrial minerals increased somewhat, but were more than offset by heavy losses in other mineral revenues, including a 96-percent decrease in collections from the mineral resource tax.

A change in government policy regarding water taxes resulted in a considerable increase in the tax burden of some B.C. mineral companies. In 1981, 25 companies paid $4.5 million in water taxes, while in 1982 these companies paid a total of $17 million.

5. ALBERTA

Introduction

Alberta's principal mineral product (excluding oil and gas) is sulphur, a by-product of natural gas production. The province produces almost all of Canada's sulphur. The value of Canadian elemental sulphur sales for the year was about $790 million, a significant drop from 1981. Alberta is also Canada's leading producer of coal, with production of 25 million tonnes in 1982, valued at over $400 million. There are no base metal mines in the province.

Mineral exploration, almost entirely for coal, fell by about 60 percent from 1981 levels, reflecting depressed coal export markets.

Assistance to the Mineral Industry

A $500,000 feasibility study was carried out on behalf of the Government of Alberta on a coal slurry pipeline from Alberta to the west coast. The report was published by the province and made available to interested parties.

Construction began during 1982 on a facility to house the Alberta Coal Mining Research Centre, the Coal Department of the Alberta Research Council, and the Clover Bar Coal Research Laboratories of CANMET. The facility will be located in Devon, 15 km southwest of Edmonton. The Alberta/Canada Energy Resources Research Fund has allocated $22 million for the construction.

To encourage and assist exploration for metallic minerals, the Department of Energy and Natural Resources (ENR) instituted a program of diamond drill core selection and storage. The cores are used by the Alberta Research Council in its studies of the Athabasca Basin.

Regulation of the Mineral Industry

In 1982 ENR initiated revision of the 1976 Coal Development Policy for Alberta, and conducted related discussions with the Coal Association of Canada. A major objective of the revision is administrative simplification of lease tenure policies and coal land classification for exploration and development.

The Occupational Health and Safety Division (OH&S) of Alberta Workers' Health, Safety and Compensation Board and the Energy Resources Conservation Board (ERCB) signed an agreement transferring the administration of the Coal Mine Safety Regulation and Quarry Regulation from ERCB to OH&S. Under the auspices of OH&S, an ad hoc committee prepared a draft of a new Mine Safety Regulation which will replace the existing Coal Mine Safety Regulation. The new regulation will cover oil sands, mines, and quarries.

Coal Proposals

The Alberta government gave approval in principle to the preliminary disclosure statement of Esso Minerals and Associated Porcupine Mines, which plan to develop a 3-million tpy thermal coal mine near Hinton. Formal approval by the Alberta Energy Resources Conservation Board is required prior to production startup, which is scheduled for 1987. The preliminary disclosure of Forestburg Collieries was also approved, for a surface mine to fuel the Battle River generating station. The proposal by Fording Coal and TransAlta Utilities for a thermal coal mine and associated generating station near Red Deer to export electricity to the USA was turned down for environmental reasons.

Approval was granted by the provincial government to develop Union Oil's Obed Marsh thermal coal mine in west central Alberta. The $300-million project has been under study for a number of years. Initial shipments are scheduled to begin in late 1984 to markets in Asia and Europe.

Taxation Matters Affecting the Mineral Industry

The Coal Royalty Regulations were amended during 1982, extending the phase-in stage from 3 to 5 years before reaching the full royalty rates for new coal projects started after 1 September 1981.

6. SASKATCHEWAN

Introduction

Following the election of a Conservative government early in 1982, the new Minister of Energy and Mines, Colin Thatcher, stated that the private sector will have priority for future expansions in the potash industry, and that the government intended to give the private potash corporations a larger share of the action, 'along with the associated burdens, risks, and potential profits'. Premier Grant Devine also assured the industry that the province was 'open for business' for private sector investment, and that Crown corporation activity in the mineral industry would not continue to expand.

Direct Investment or Equity Participation

The government announced in October that private-sector companies will no longer be required to offer up to 50 percent participation to the provincially-owned Saskatchewan Mining Development Corporation (SMDC) in new hard-rock mineral exploration ventures. SMDC has also closed its Vancouver office, and pulled out of exploration activities in British Columbia.

Lagging potash sales and increasing inventory that began in the last quarter of 1981 worsened in the second half of 1982, forcing further production cutbacks and layoffs at the province's potash producing companies. The Potash Corporation of Saskatchewan (PCS) curtailed production of finished product from PCS Mining Lanigan Division on March 29 for about six months. Production at PCS's Cory, Allan, Lanigan and Rocanville divisions was halted for two months in the summer to help reduce high inventory levels which have resulted from weak markets. (PCS Mining is the production subsidiary of the Potash Corporation of Saskatchewan.) The Phase II expansion at Lanigan is continuing but at a reduced pace, and plans for a new mine (Bredenbury) have been shelved for the present.

On June 28 Canpotex announced that the Potash Corporation of Canada has rescinded its previous decision to withdraw from Canpotex, effective June 30. Canpotex is the offshore marketing agency for Canadian potash producers. The return of PCA (and of Kalium Chemicals) to Canpotex means

that all Canadian producers once again negotiate their non-North American sales through a single agency. Canpotex is the largest supplier to the offshore markets, representing more than 25 percent of the world's potash capacity.

Regulation of the Mineral Industry

A six-member Saskatchewan government team examining the decision of Eldorado Nuclear Limited (a federal Crown corporation) to close its mine in Uranium City released its report in February, concluding that the ore was running out and the mine was no longer profitable. According to the report, the uranium ore in the mine is worth about $125 a ton in place, but costs about $200 a ton to produce. To achieve break-even status, either the price of uranium or the grade of uranium ore would have to double, or production costs would have to be halved.

Early in 1982, the Minister of Energy, Mr. Thatcher, expressed his opposition to the expansion of Crown corporation activity in the Saskatchewan uranium industry through Eldorado's acquisition of the Canadian assets. However, his opposition did not succeed in preventing the transaction, and as a result, 2 Crown corporations, SMDC and Eldorado, are now the major uranium producers in the province.

7. MANITOBA

Introduction

The value of metallic mineral production in Manitoba for 1982 was $358 million, down $121 million from 1981. The decrease was attributed mainly to continuing depressed world markets and prices for base metals, and resulting production shutdowns. A number of communities in northern Manitoba were particularly hard hit by these production cut-backs.

In the Speech from the Throne in February 1982, the new NDP government of Premier Howard Pawley announced its intention to use Manitoba's endowment of energy and mineral resources 'for the benefit of all'. A new Crown corporation, the Manitoba Oil and Gas Corporation, was proposed to participate in the exploration and development of petroleum within the province. The government also announced that it planned to review several private-sector resource-based project proposals that had received the support of the previous government, including the establishment of an aluminum smelter north of Winnipeg by Alcan and the development of potash deposits in southwestern Manitoba. (Both of these projects have since been suspended by the companies involved, reportedly because of weak market demand.) The government also announced its plans to increase its share of financing for the Trout Lake copper mine near Flin Flon, and to invest in several other mineral discoveries through the provincially-owned Manitoba Mineral Resources Ltd. Resource development under the new government is to be channelled through a new Crown Investments Department.

Wilson Parasiuk, the Minister of Mines and Energy, expanded on his government's policy and plans for the mineral industry in a speech in March 1982, in which he stated that the government would be: 'actively seeking public participation through joint ventures with private mining companies on a voluntary basis'. He also noted that the level of mineral exploration would be reviewed periodically, 'to determine that a healthy level is being maintained in those areas with potential for discoveries', and that Manitoba 'will strongly argue for measures that could bring about a revival of the junior mining sector' in the deliberations of the federal-provincial working group studing mining taxation. The Speech from the Throne of 2 December

1982 confirmed that public investment in Manitoba Mineral Resources Ltd. would be increased for mineral exploration through joint ventures.

Direct Investment or Equity Participation

Tantalum Mining Corporation of Canada Ltd. (Tanco), 25-percent-owned by the Manitoba government, closed its mine at Bernic Lake for an indefinite period late in 1982 due to market weakness. Tanco, which until the closure was the only producer of tantalum in Canada, is conducting research aimed at finding new applications for tantalum oxide, tantalum carbide, and tantalum metal.

The Trout Lake copper-zinc mine, operated by Hudson Bay Mining and Smelting Co. Limited and in which the Manitoba government has a 27-percent interest through Manitoba Mineral Resources Ltd., went into full production in 1982. In addition to its participation in the Trout Lake project, Manitoba Mineral Resources was involved in exploration work under 13 voluntary joint venture projects and 15 mandatory participation agreements during the 1982/83 year.

In December 1982, the promised legislation was introduced to establish the Manitoba Oil and Gas Corporation, designed to provide a window on the industry, stimulate existing oil development, and husband Manitoba's oil resources through enhanced recovery projects. The public oil and gas corporation will be capitalized over four years with $20 million and will initially concentrate on joint ventures in southwestern Manitoba.

Assistance to the Mineral Industry

In the February 1982 speech from the Throne, the government pledged to cooperate with mining companies and trade unions to examine measures to offset the harmful effects on communities from the cyclical nature of the mining industry. Among the programs initiated to this end were the concerted efforts made by the provincial and federal governments, as well as Sherritt Gordon Ltd., to identify new deposits in the Lynn Lake area which could be developed following the expected exhaustion of reserves at the Fox mine in the near future. The province also took advantage of the federal government's revisions to the Unemployment Insurance Act to introduce several federal/provincial pro-

grams of assistance to unemployed mine workers, involving development and reclamation work at mine sites, as well as community projects, but excluding actual mineral production.

Regulation of the Mineral Industry

No new legislation was introduced in 1982 pertaining to the nonfuels mineral industry, although the Surface Rights Act was introduced, dealing with access to oil and gas properties for purposes of exploration, development and production. The act is based on the recommendations of the Nugent Commission. The Oil and Gas Tax Act was amended to create the Manitoba Drilling Fund, and additional oil and gas incentives resulted from amendments to the Crown royalty regulations under the Mines Act.

International Mineral and Chemical Corporation (IMC), of Northbrook, Illinois was informed in February by provincial officials that it would no longer be the only company considered for potash development in the province.

8. ONTARIO

Introduction

Mineral production in Ontario was at a very low level throughout 1982, with most companies operating at a loss, and many existing operations and new developments on hold. Exploration and development was largely limited to gold mining where there was some optimism that prices will keep ahead of mining costs. There was relatively little capital expenditure, and production cutbacks forced many companies to lay off employees at all levels. Nevertheless, major excitement and considerable activity was generated by good drilling results on properties staked by prospectors McKinnon and Larche, which triggered gold exploration in the Hemlo area with the help of risk capital from Vancouver, exploration incentives through Ontario's Mineral Exploration Program (OMEP), and information from the Ontario Geological Survey.

Direct Investment or Equity Participation

Ontario Hydro, a provincial Crown corporation, announced a $400-500 million uranium purchase from the Key Lake project in northern Saskatchewan. The purchase will make up for the shortfall resulting from the renegotiation of contracts with Rio Algom Ltd. and Denison Mines Ltd. late in 1981. The Key Lake project is jointly owned by the Saskatchewan Mining Development Corporation, Uranerz Exploration and Mining Limited, and Eldorado Resources Limited. Each partner markets its share of production separately. The Ontario Hydro contracts are with Uranerz and Eldorado, and reportedly cover one third of Hydro's fuel requirements between 1985 and 1993.

An unsuccessful bidder for the Ontario Hydro contract was Madawaska Mines Limited, a small producer at Bancroft, Ontario, which was reactivated in 1975 after a 10-year shut-down. Madawaska's continued operation depended on replacing its contract with Agip SpA, an Italian state-owned company. The Agip contract was terminated in March 1982. The mine ceased operations and was placed on standby in July 1982.

Assistance to the Mineral Industry

Mining

The Board of Industrial Leadership and Development (BILD) provided funding for construction of custom gold milling facilities under a program called GOMILL. The first GOMILL agreement was signed with Pancontinental Mining Canada Limited early in 1982 for a mill located in Beardmore and serving the Jellicoe, Geraldton and Longlac areas as well. The $1-million loan will be forgiveable over 5 years. The second was signed in November with Goldlund Mines Limited, which will receive a $780,000 grant for a custom milling facility which is scheduled to open in 1983 at Goldlund's Sioux Lookout mine. Mills established under this program are obligated to provide custom gold milling facilities to nearby property owners.

Another sub-program of BILD has allocated $7.7 million to encourage development in industrial minerals. Three grants were announced in May for industrial mineral plant expansions. Steep Rock Iron Mines will receive $1.35 million for its calcite processing plant near Perth. The $5.4-million expansion program will double the plant's fine grade capacity. A grant of $650 thousand to Canada Talc Industries will assist in a $2.7-million expansion of its plant at Madoc that will provide capacity for extra fine grades of talc for the paint and cosmetics industry. Manitoulin Dolomite Inc. was offered a grant of $300,000 upon completion of its $1.7-million expansion program to increase output and product range.

Mining Equipment Manufacturing Sector

BILD approved the establishment of a $20-million Resource Machinery Development Centre which was opened in Sudbury in December 1982. The mandate of the new centre is to encourage mining and forestry research and development which will increase Ontario-based manufacturing of resource machinery and equipment, as well as provide a focal point for the development of projects to study Canada's growing equipment needs. The Centre will promote the development of manufacturing opportunities, particularly in northern Ontario. The three objectives of the centre are:

1. to secure new markets for mining and forestry equipment;
2. to create jobs;
3. to generate revenues for the centre through the commercial application of the research and development projects.

Labour

A new federal-provincial job creation was established in Ontario to assist unemployed mining workers. The program, one of five resource-related job programs for over 3400 workers in Ontario, was meant to be a bridging measure that would allow companies to rehire unemployed skilled workers and keep them occupied until local economies recover. Funding for the programs comes from both federal and provincial governments. The federal government offers an enhanced unemployment insurance benefit, up to a maximum of $240 per week. The province, through the Ministry of Natural Resources, adds 25 percent on top of the federal contribution, up to an additional $60 per week. The provincial contribution, which is funded by BILD, also provides family benefits, equipment, materials, and technical support. Total provincial cost is expected to be more than $5.5 million. Projects allowable include fencing and capping of abandoned mine openings, mine tailings rehabilitation and other reclamation activities, ground development before production, and other nonproduction activities on mine sites, as well as community improvement. Among the projects supported by the Mines Special Employment Program is the development of 754 metres of drift in the Big Nickel Mine which is now part of Sudbury's new Science Centre. It is proposed to use the drift eventually to test mining equipment, train miners, and conduct other mining-related research.

Infrastructure

The Ontario government contributed $27 million of the $33 million cost of a 180-km road to the Dome Campbell-Amco joint venture property at Detour Lake. Production is expected to start in 1983. A 138-km hydro line is also being installed.

Research

A $3-million grant from BILD will allow the Ontario Centre for Remote Sensing (OCRS) to expand its technology training program for private industry. OCRS has been receiving data from land satellites for nine years and has developed methods for extracting essential information from satellite pictures about forest, geological, and water resources.

Two policy background papers were released by the Ontario Ministry of Natural Resources. The papers, entitled World Mineral Markets-Stage II and Stage III, focus on world markets for copper, zinc, nickel and aluminum. Stage II contains a general overview of these markets as well as data on scrap metal markets, money supply and interest rate variables. It predicts a slight rise in copper, nickel and zinc consumption over the next few years, with some small growth in real prices. Stage III is a manual that will enable users to enter the model into their computers, and should be a valuable tool for the mining industry, governments, investment planners, and banks. A separate computer tape is also available.

A report on a two-year project to design and develop a computer system to analyze mineral industry statistics was released by the Ontario Ministry of Natural Resources in March. Managed by the Mineral Statistics Section, the computer system produced its first publication entitled 1981 Ontario Mineral Score. The publication includes information on cost of production, geological analysis of Ontario production from 1975 to 1980, estimates of 1981 production in Ontario and Canada, a graphical analysis of production, and a calculation of Ontario's standing in world markets.

Construction was scheduled to begin in September on diamond drill core libraries in Timmins, Kirkland Lake and Sault Ste. Marie. Further libraries are planned for the future. The objective of the libraries is to reduce redrilling costs by storing and cataloguing drill core samples to show prospectors, geologists and mining companies what has been found at previously-drilled sites. Financing for the libraries will come from the BILD program through the Ministry of Natural Resources.

Regulation of the Mineral Industry

The Ontario government released a discussion paper containing a number of proposed revisions to the Ontario Mining Act designed to enable companies and individuals to operate in Ontario with less regulatory interference. Among the suggestions were the following:

1. a staker's licence will be valid for life;
2. block staking or enlarged claims may contain up to 640 acres each;
3. allowance of assessment work credits will be based on dollars rather then man-days;
4. a lease will be issued for mining rights only.

The proposed changes were released for public and industry comment in July and written submissions were invited by the end of September. The government has issued assurances that the security and principles of acquisition of mineral title will not be altered, and that reasonable access to Crown land will remain intact.

The Royal Commission on the Northern Environment began a series of informal hearings in northern Ontario communities November 22, starting in Sioux Lookout. The hearings focus on allocation, use, and management of natural resources, as well as how decisions are made about development and the environment, such as the Environmental Assessment Act. The commission began its work in 1978, and the public has been invited to make written submissions to assist in formulating final recommendations to the Ontario government on development north of 50° latitude in Ontario.

The Ontario Royal Commission studying asbestos continued its work in 1982. On August 20, the Ministry of Labour put into effect new regulations establishing permissible exposure limits for various fibre types. The limits follow the British standards, and will be reviewed and possibly revised following completion of the Royal Commission study.

The Supreme Court of Ontario has ruled that two federally-owned corporations cannot be prosecuted for conspiring to fix domestic uranium prices in connection which an international uranium cartel. Mr. Justice John Holland ruled that Eldorado Nuclear Limited and Uranium Canada Limited are immune from prosecution under the Combines Investigation Act.

Late in 1982 the provincial Cabinet approved a new Mineral Aggregate Resource Planning Policy, which asks municipalities to identify aggregate resources and to protect them from incompatible land use in the preparation of their official plans. The policy also calls for development of methods and criteria for establishing new pits and quarries, and for rehabilitation.

The Ontario Securities Commission has approved most of the revisions suggested by Toronto Stock Exchange officials; the changes are designed to improve the regulatory environment for the financing of junior mining companies. The TSE recommendations were based on discussions that followed publication of the Menzel Committee Report in 1981.

Taxation Matters Affecting the Industry

The 1982 Ontario budget contained no increases in the rates for corporate or personal taxes. Small businesses were granted a 2-year holiday from provincial corporate income tax.

9. QUEBEC

Introduction

In its publication Le Virage Technologique, released in 1982, the Quebec government laid out a program of economic action for 1982-86. With respect to mining, the government proposed to encourage private sector development in gold and industrial minerals. Crown corporation activity is to be both consolidated and diversified, with initiatives in exploration, mining, and processing. Noting that 70 to 80 percent of recent mineral exploration has been in the Abitibi-Temiscamingue region, the report called for broad regional development and diversification. Improvements in the mineral tenure system were proposed (see below, under Regulation), as were investment incentives for junior mining and an emphasis on research, particularly for asbestos.

1982 was not a good year for the industry in Quebec, as weakness in international markets for asbestos, iron ore, copper, and zinc, and much lower prices for gold and silver, resulted in cutbacks and layoffs for many Quebec mines and hardships for many mining communities.

Direct Investment or Equity Participation

SOQUEM (Société québécoise d'exploration minière)

For fiscal year ending 31 May 1982, SOQUEM showed a drop in operating profits from $23.9 million to $21.0 million, largely due to the decline in the price of gold. This trend continued through the year, with rising costs leading to 1982/83 profits of only $17 million, in spite of an increase in total revenues. During 1982 SOQUEM built a modern cyanidation plant, with a capacity of 1,000 tonnes of gold ore per day, at their 50-percent-owned Doyon Mine site, and expanded the Est-Malartic plant capacity to 1,100 tonnes per day. In new ventures, SOQUEM acquired a second block of 500,000 shares in the Sullivan Mining Group Ltd. Sullivan holds a 50-percent interest in the Mount Pleasant tin-tungsten joint venture through its 89-percent-owned subsidiary, Brunswick Tin Mines, and a 35-percent interest in the Arthur White gold mine of Dickenson Mines.

The SOQUEM subsidiary Exploration Aiguebelle Inc. (36.8 percent owned by SOQUEM, following a public offering)

completed its first year of gold production. In industrial minerals, a new processing plant at St. Bruno de Guigues with an annual capacity of 125,000 tons of dolomitic limestone had been nearly completed by the end of March 1982, and production of salt from Seleine Mines began in September 1982. The rock salt mine provides jobs for 185 people on Iles de la Madeleine. The Quebec government has agreed to accept 300,000 tonnes during the first year of operation.

The exploration department of SOQUEM during the 1982/83 fiscal year spent $5,986,000 on 68 exploration projects (down from over $10 million in the previous year), 45 of which were wholly company-financed, 20 were joint ventures, and 3 were research projects. Joint deep drilling projects in search of copper at Noranda have shown encouraging results. Several gold zones have been identified at various gold properties in which SOQUEM has an interest. For example, SOQUEM has an option to acquire a 60-percent interest in 38 of the 41 claims being explored jointly with New Pascalis Mines located in Louvicourt and Pascalis Townships. The cost of the acquisition was $420,000, to be paid before 1 August 1982. SOQUEM also has an option to acquire a 100-percent interest in the remaining 3 claims, provided it spends $6 million on development work over the next four years. The company has discontinued its contribution to the development of the Montauban gold project and holds an option to acquire the Lac La Galette silica deposits.

Société Nationale de l'Amiante

On March 12, the Minister of Energy and Resources registered in the National Assembly an order concerning the acquisition of General Dynamics Corporation (Canada) by Société Nationale de l'Amiante (SNA) and the guarantee of the debt by the Quebec government. This order authorizes SNA to conclude the agreement announced on 12 February 1982 between the province and General Dynamics, and involves an initial investment by Quebec of $16 million for control of GDC, with the option to begin buying shares in the parent company's shares in three years, for $42 each, or a total of $65.1 million, to be compounded at 16 percent annually.

SNA will build a $14-million pilot plant in Thetford Mines known as Magnaq-1. The plant is expected to produce

about 6,000 tpy of magnesium oxides from asbestos tailings. This project is the result of research which began in 1979 to develop new products and processes.

Sidbec

Sidbec, a steel company owned by the Quebec government, reported a loss of $78.1 million in the first half of 1982. Most of the Crown corporation's losses are attributed to a 50.1-percent share in Sidbec-Normines Inc., a Quebec north shore iron-ore and pellet producer. Sidbec is required by contract to purchase about 2.4 million tpy of pellets from Sidbec-Normines Inc. at a price based on the Lake Erie base price. It was, however, able to use only about 1 million tonnes in 1982 because of the depressed steel market; the excess was sold at a loss on the spot market. Sidbec's serious financial difficulties necessitated an extension of credit from the Quebec government, which increased the company's line of credit from $50 to $85 million.

Hearings on the future of Sidbec and its subsidiaries were held November 10 and 11, 1982, by a National Assembly Legislative Committee. The alternatives considered for the company included: continuing to operate at 90 percent of capacity (5.4 million tpy of pellets); closing permanently in 1983; or operating at 62 percent capacity (3.7 million tpy). The latter would require agreement by the partners, British Steel Corp. and U.S. Steel Corp., to take 100 percent of their share of the 3.7 million tons annual production. Discussions began in late November. The hearings took into consideration the company's plans for survival and submissions from outside interests.

Assistance to the Mineral Industry

In an effort to get the Pechiney Ugine Kuhlmann metals and chemical group of France to locate a medium-sized aluminum smelter at Becancour, 125 km northeast of Montreal, the government indicated that it may be prepared to invest up to $100 million in the smelter project. The total cost of the smelter project could reach more than $1 billion. The ingots would be exported mainly to the USA, where Pechiney has major interests in the metals fabrication field. Feasibility studies were to be completed by the end of the year and the company will not make a final decision on the smelter development until all factors are taken into account.

In addition, Hydro Quebec offered a concession to Pechiney Ugine Kuhlmann in contracting for a supply of power at 1.6 cents a kilowatt hour, about .2 cents below the standard rate. Further, the rate will not increase more than 10 percent a year for the first 20 years of its 25-year life. A similar contract with Hydro Quebec has been signed by Canadian Reynolds Metals Co. Ltd. of Baie Comeau, which operates a 170,000-ton aluminum smelter and is planning a $500-million expansion.

The Quebec government participated in the establishment of a centre for information on asbestos, in cooperation with the federal government, the Institute of Research and Development on Asbestos (IRDA) in which the government of Quebec is a shareholder, and the Institute of Medicine, Work and the Environment (IMTE) whose members are the asbestos mines. The centre, which is based in Montreal, will collect and disseminate information on all matters relating to asbestos. It will be concerned with promotion of the safe use of asbestos by workers as well as consumers, and will also be used for promotion of Quebec asbestos in international markets. The initial budget will be $600,000 per year.

The Quebec government granted $767,000 for the renovation and modernization of the pilot plant of the Centre of Mineral Research in Saint-Malo, Quebec. The pilot plant was opened in 1960, and is designed to aid the technological development of Quebec's mineral industry. It has a mandate to adapt, develop and optimize production to the semi-industrial stage; to encourage transformation and use of mineral substances from Quebec; to promote the solution to technological problems in the mineral industry; and to provide technological support for the establishment of new facilities in the mining and metallurgy sector.

Regulation of the Mineral Industry

The Ministry of Energy and Resources in 1982 presented its new legislation concerning the revocation of mining rights, and amendments to the Mining Act (Bill 59). The changes are intended to remove a major obstacle to mineral exploration by replacing the existing double system of ownership, whereby surface owners who acquired land before 1880 also acquired the mineral rights, except those pertaining to gold and silver. The changes revoke the pre-1880 mineral rights, thus eliminating the need for costly legal searches

for the owners of such rights. Pre-1911 mining concessions and mining rights in land under seigneurial tenure will also be revoked.

The Ontario Securities Commission in March announced a hearing into the refusal by the Quebec Crown corporation, Caisse de Dépôt et Placement du Québec, to file insider trading reports in acquiring control of 42 percent of Domtar in 1981. Pending the hearing, the Caisse was forbidden to trade in the equity or money markets in Ontario. Under the current regulations of the provincial securities commission, there is no control over the trading activities of governments, Crown agencies or Crown corporations. Other persons or firms holding 10 percent or more of the shares in a publicly-owned company must report all trading activity to the commission by the tenth day of the month following the transaction. The regulations are designed to ensure that shareholders are aware of who is in control of the company. Following the attention stirred up by the Caisse issue, Quebec Finance Minister Jacques Parizeau announced that the Quebec Securities Act will be amended to cover the government and all Crown corporations.

Belmoral Mines Ltd. was acquitted of charges of criminal negligence in the deaths of eight miners resulting from the May 1980 collapse of workings at the company's Ferderber gold mine near Val d'Or. The Quebec Crown prosecutor disagreed with the verdict and appealed on April 1. According to the prosecutor, the verdict contradicts the conclusions of the provincial commission of inquiry into the causes of the Belmoral cave-in, which blamed Belmoral for the accident.

10. NEW BRUNSWICK

Introduction

The publication Mineral Strategy Update released in 1982 by the Ministry of Natural Resources reconfirmed the government's commitment to encouragement of mineral activities in the province, in the pursuit of the provincial goals of increasing per capita income and minimizing net migration. The province's mineral resource development policy was summarized as being: 'to promote and encourage the orderly exploration for and development of the province's mineral resources.' It was also noted that tax policies should ensure both optimum development and a fair return to the people of the province. In order to encourage further processing and the accompanying economic benefits, provincial policies include both tax incentives and direct assistance to proposed projects such as the zinc smelter planned by Brunswick Mining and Smelting at Belledune.

The mineral industry was flourishing at the start of 1982 as New Brunswick's fastest growing industry, but lost momentum during the year, due largely to weak markets for base metals. Three new mines were prepared for production: two potash operations and a tungsten-molybdenum mine. Value of production had increased 44 percent in 1981 to almost $534 million (there is some distortion in the apparent increase, however, in that 1980 output was affected by a four-month strike at Brunswick Mining and Smelting Corporation's zinc-lead-copper-silver mine near Bathurst). In 1982 production declined 2.7 percent, to $517 million. Government projects planned for 1982 largely continued those already in place under the $11.3-million five-year federal-provincial agreement. These include detailed mapping, stream sediment and geophysical surveys, and an inventory of peat resources.

Direct Investment or Equity Participation

In 1980, 17 blocks with coal potential were identified in the province. In 1982 the first of these blocks, comprising over 14,000 hectares in the Chipman-Minto area, was released for exploration. It was awarded to the New Brunswick Electric Power Commission, which has a 60-day right of first refusal on all areas with coal potential.

Assistance to the Mineral Industry

In his 1982 electoral campaign, Premier Richard Hatfield announced that his government was prepared to spend $3 million to keep Heath Steele Mines Ltd. operating for the next six months, provided the company bore the first $3 million loss. Earlier, the company had decided that it would close its mine on 1 November 1982 if no improvement was seen for copper, zinc, lead and silver markets. However, in October the company announced that it planned to stay open until at least April 1983, and was able to do so without the help of the provincial government.

Regulation of the Mineral Industry

The New Brunswick government is in the process of reviewing the Mining Act, and has invited comment from the industry and other interested groups. The government hopes that the resulting changes will encourage mineral exploration and development in the province.

Taxation Matters Affecting the Industry

The firm of Price Waterhouse has been engaged to review the Metallic Minerals Tax Act, to develop regulations and guidelines that will help reduce ambiguities in interpretation and anticipate a broader range of possible circumstances. In 1982 an amendment introduced minor changes designed to clarify the definition of assets eligible for depreciation, and to provide for depreciation against existing income, as in the federal legislation. It also allowed joint venture partners to pay tax separately, if they so choose. One regulation (82-211) was also introduced under the Act, relating to interest on outstanding balances. No action was taken during the year on the Price-Waterhouse recommendations.

11. NOVA SCOTIA

Introduction

Coal continued to dominate the mineral industry in Nova Scotia, boosting the total value of production to $292 million, an increase of 8.7 percent. The other major minerals are aggregates, gypsum and salt. Mineral exploration dropped sharply from 1981 levels, when interest had focused on a variety of minerals, including tin, gold, uranium and potash. The decline (over 75 percent) has been attributed to falling prices and demand, the uranium moratorium, and the unanticipated withdrawal of several petroleum companies from mineral exploration in the province.

The departments of Mines and Energy and of Development, working with the Voluntary Planning Committee (a consultative agency made up of representatives of labour, business and government), embarked on the preparation of a mining strategy for Nova Scotia during 1982. The strategy will form part of a comprehensive economic development strategy for the province.

Direct Investment or Equity Participation

The provincially-owned Novaco Ltd., with a mandate to investigate and mine surface coal in Nova Scotia, continued its strip mining operation at Point Aconi, Cape Breton. The company also continued a box-cut investigation of coal seams in Springhill. Novaco is a wholly-owned subsidiary of Nova Scotia Resources Ltd., a Crown corporation established in 1981 to pursue joint ventures in the natural resource field. The parent company's main activities to date, apart from the acquisition of Novaco, have involved offshore natural gas and oil exploration programs.

Assistance to the Mineral Industry

Federal-Provincial Agreements

A grant provided under the Canada/Nova Scotia Agreement on Oil Substitution and Conservation will allow Noval Technologies (a subsidiary of Nova, an Alberta Corporation) to complete a coal demethanation drilling program in the Pictou coalfields near New Glasgow, Nova Scotia. Noval proposes

a 10-well development producing about 30,000 cubic metres per day if the testing proves successful. The methane would be used by local industries. A decision should be made by early 1983.

The Canada-Nova Scotia Cooperative Mineral Agreement was in effect for its first full year. The cost of programs is shared 30-70 by the Nova Scotia and federal governments respectively. A total of approximately $1.7 million was committed for 1982. Many new geological surveys were initiated during the year, including those in Halifax and Guysborough counties along the eastern shore where detailed geological studies and field mapping concentrated on a search for gold potential.

New diamond drill core library facilities were built in Stellarton with funding from the Cooperative Mineral Agreement. The core is collected from exploration companies in various parts of the province and from the diamond drilling conducted by the Department of Mines and Energy. By preserving the core, the library retains the data source for future use in evaluating the geological and mineral potential of the province.

Regulation of the Mineral Industry

Following the declaration of a moratorium on uranium exploration in the province in September 1981, Judge Robert J. McCleave was appointed in January 1982 as sole Commissioner to investigate the impact of uranium exploration and mining in the province. Under the terms of the Public Inquiries Act, Judge McCleave is to look at all scientific and technical data on uranium mining that relates to workers, the public and the environment. The first stage of the public inquiry consisted of 44 public hearings held between April 2 and October 8, 1982. Phase two will involve more expert testimony on the key issues and phase three will consist of additional comment from experts designated by Judge McCleave. A decision on whether or not the moratorium will be lifted is not likely before mid-1983. Kidd Creek Mines have outlined about 1.5 million pounds averaging 0.2 percent uranium at the Millet Brook prospect in Hants County, and is among the five groups who have recommended that the moratorium be lifted. About 75 witnesses, chiefly representatives of environmental and anti-nuclear groups, have testified in favour of continuing the moratorium. The submission of the Nova Scotia Department

of Mines and Energy concluded that, while no economic deposits have yet been discovered, there is a reasonable possibility of future commercial discoveries.

The provincial government continued efforts to find a new operator for the Yava lead mine which went into bankruptcy in late 1981. The former Yava mill was purchased by Novex Mines Ltd. for milling barite from its nearby deposit. Novex has a contract to provide mud-grade barite for the offshore drilling programs of the Scotia shelf.

Taxation Matters Affecting the Industry

The Nova Scotia government announced that it would extend the 10-percent provincial hospital tax to the mining industry, which has previously been exempt. Further negotiations and considerations resulted in a compromise in which certain goods purchased for mining and exploration would be taxed at 4 percent, and others at 10 percent.

12. NEWFOUNDLAND

Introduction

Sharp declines in both mineral production and exploration made 1982 a difficult year for the industry in Newfoundland. Production of iron ore, which has accounted for over 85 percent of the value of mineral production in recent years, fell by 37 percent.

Assistance to the Mineral Industry

The five-year $12 million Canada-Newfoundland Mineral Development Subsidiary Agreement ended March 31, 1982. The agreement was designed primarily to improve the geoscientific knowledge base in Newfoundland and Labrador. Under the agreement, bedrock geological map coverage was greatly extended, regional geochemical surveys were conducted, mineral aggregate deposits were inventoried, and core storage facilities were built. Reports and maps from all surveys either have been published or are in process.

Geoscientific work continued under a 1982-84 cooperative program, with separate provincial and federal funding and activities for projects coordinated by the Geological Survey of Canada and the Newfoundland Mineral Development Division. Funding for these projects is $3-4 million from EMR and $660,000 from the province.

In December 1981 the Baie Verte asbestos mine of Advocate Mines Ltd. was closed as a result of weak demand for asbestos. The Government of Newfoundland had passed a bill the previous July authorizing expropriation, if that appeared to be the only way to ensure continued operations. On 3 September 1982, the Government of Newfoundland expropriated the property and transferred ownership to the newly created Baie Verte Mines Inc., a subsidiary of Transpacific Asbestos Inc. of Toronto. Financial contributions towards the transaction included $3.25 million in loan guarantees from Newfoundland, $13.8 million in loans and loan guarantees from the federal government and $4 million from Transpacific. The mine was reopened, and shipments of asbestos were resumed by October 1982.

Regulation of the Mineral Industry

The government is taking action to recover mineral properties on which taxes are owing under the 1978 Mineral Holdings Impost Act. Through this action, an additional 47,000 hectares of mineral land will become available for interested parties to acquire the mineral rights by ground staking. Notices were published in the Newfoundland Gazette in July, and the lands were opened for staking 31 days later. This is in addition to the significant number of mineral holdings that have reverted to Crown status, especially during 1979 and 1980, under the terms of the 1977 Mineral Act. By the end of 1982, 80 percent of Newfoundland and 95 percent of Labrador was available for claim staking. By contrast, in 1970 only 10 percent of the province was Crown land.

Amendments to the Mineral Regulations, effective 3 September 1982, allow grouping of claims and claim blocks which are contiguous, without any limitation on size. The specifications for staking claim blocks were also redefined to allow for irregularly shaped blocks. Assessment work credits were increased from $30 to $100 per 8-hour day, for work personally conducted by the licence holder.

The Mineral Act was amended to reinstate the original language of section 15, requiring the reporting of surveys performed for exploration purposes on Crown lands to which title may not have been acquired.

Additional changes to the Mineral Act and Regulations are planned for 1983. The map staking and reserved area licence modes of acquiring mineral rights are to be activated, to encourage exploration activity. Other changes involve provisions for staking claims on private property, for depositing drill core with the government on a confidential basis, and for allowing credit for exploration work performed before staking.

13. NORTHWEST TERRITORIES

Introduction

The federal department of Indian Affairs and Northern Development (DIAND) is responsible for administration of all mining and mineral activities in the Northwest Territories. The territorial government advises DIAND on matters of mineral policy, and on review, approval and monitoring of specific resource development projects. It also has responsibility for administration of the Mining Safety Ordinance. For mineral policy initiatives introduced by DIAND, see chapter 3 on federal government activities.

Reversing the overall Canadian trend for 1982, the NWT saw an increase of over 33 percent in the value of mineral production, as new gold mines came on stream, and the two most northerly base metal producers, Polaris and Nanisivik, continued to operate. Pine Point Mines continued in production throughout the year as well, but suspended operations in the first week of 1983. Exploration expenditures however fell about 50 percent.

The government of the territory focused its attention on a variety of resource-related issues, including its new Resource Development Policy, taxation of northern nonsalary benefits, and resource revenue sharing.

Regulation of the Mineral Industry

The Executive Committee of the Government of the Northwest Territories approved the Resource Development Policy prepared by the Energy and Resources Secretariat. The primary purpose of the policy is to maximize net benefits of resource developments to the people of the Northwest Territories; it will also facilitate some influence over the pace and scale of development, and provide for monitoring of ongoing projects. The policy enumerates nine principles to be used to evaluate resource development proposals in terms of economic, social and environmental implications. It is intended to apply to exploration, development, and production phases of all projects within the jurisdiction of the NWT. Key provisions include the identification of Development Impact Zones to deal with developments on a regional basis, and the Territorial Assessment and Review Process and associated Development Certificates, which would be requir-

ed in addition to the existing federal approvals. The policy will not be implemented until detailed guidelines and criteria have been developed.

In November the Government of the Northwest Territories announced the formation of a multi-agency group to draft guidelines for uranium exploration in the NWT. The working group includes representation from industry, labour, the federal government and the GNWT. It will deal with health and safety issues, environmental issues, and land and water use.

Major amendments to the Mining Safety Ordinance were drafted, following consultation with labour and management representatives from the industry. The Ordinance is administered by the mining inspection division within the department of Justice and Public Services. The division's responsibilities include environmental monitoring, mine rescue services, and compilation of mining production statistics for the territory.

14. YUKON TERRITORY

Introduction

As in the NWT, responsibility for the administration of mining and mineral activities rests with DIAND. Federal initiatives are included in chapter 3.

Following an active 1981, with a strong level of mineral exploration but falling levels of production, 1982 was a disastrous year for the mineral industry, which in recent years accounted for 32 percent of the gross territorial product in the Yukon. Exploration expenditures dropped more than 60 percent, and mineral production by almost 30 percent. Major territorial government efforts were directed toward dealing with the resulting losses in employment and revenues.

Assistance to the Mineral Industry

The Yukon government participated in the negotiations aimed at reopening Cyprus Anvil's lead-zinc mine at Faro, and signed the joint communique October 6 along with federal, union and company representatives. However, the mine was still closed at year end.

Regulation of the Mineral Industry

In 1981 the federal government introduced the framework for a new policy on land use management and planning in the north. Following this initiative, the Yukon government in 1982 formulated and announced its own land use policy for planning in the territory.

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GOVERNMENT SOURCES FOR FURTHER INFORMATION

Federal Departments

Department of Energy, Mines and Resources

Mineral Policy Sector
580 Booth Street
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(613) 995-9466

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Atomic Energy Control Board
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270 Albert Street
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Atomic Energy of Canada Ltd.
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Cape Breton Development Corporation
P.O. Box 1330
Sydney, Nova Scotia B1P 6K3
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Eldorado Nuclear Ltd.
255 Albert Street, Suite 400
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Potash Corporation of Saskatchewan
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